Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. Because of the limited space, snow survey measurements are not published in monthly reports. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 97102
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97208
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 547, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Utah
Water Supply Outlook

and

Federal – State – Private
Cooperative Snow Surveys

Issued by

Wilson Scaling
Chief
Soil Conservation Service
Washington, D. C.

Released by

Francis T. Holt
State Conservationist
Soil Conservation Service
Salt Lake City, Utah

In cooperation with

Utah State Department of Natural Resources

Robert L. Morgan	D. Larry Anderson
State Engineer	Director
Division of Water Rights	Division of Water Resources

Prepared by

Jon G. Werner
Snow Survey Supervisor
Soil Conservation Service
125 So. State St., Fed. Bldg.
P. O. Box 11350
Salt Lake City, Utah 84147

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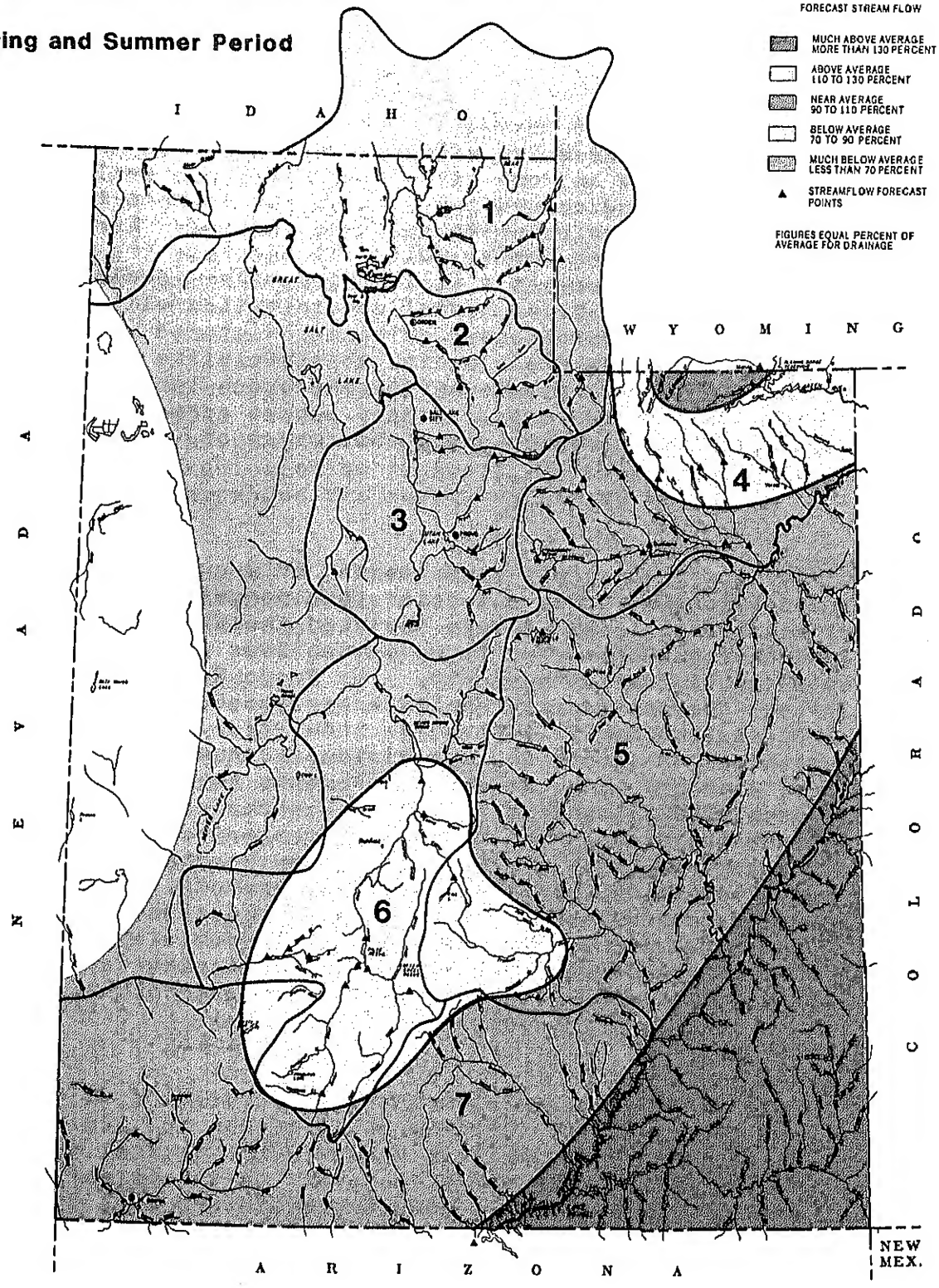

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7 E. GARFIELD, KANE, WASHINGTON & IRON CO.

GENERAL OUTLOOK

SUMMARY:

Much warmer and drier weather than normal in April produced melt on some sites nearly a month earlier than usual and caused the loss of two to more than four times more water to melt than normal. Earlier and heavier than normal melt will compress the runoff season and reduce late season streamflow levels. Persistence of below normal precipitation will necessitate an increased reliance on stored water. Water shortages are expected to materialize in areas relying on natural streamflow and areas lacking adequate stored water. Timely, above normal precipitation could reduce the impact of impending shortfalls.

SNOWPACK:

Earlier than normal commencement of snowmelt in addition to warmer and drier than normal weather conditions in April have depleted the snowpack in Utah from almost two to more than four times as much as usual during the month. The Provo River-Utah Lake-Jordan River watershed experienced the greatest April 1 to May 1 decrease in snow water content on record. One month ago the statewide snowpack was 77% of average. Snow water measurements taken the last week of April were only 45% of average--a drop of 32% from the previous month. Area by area percentages range from 0% on the Enterprise-New Harmony drainages to 114% on the Escalante River watershed. Near average snowpack in addition to the Escalante River drainage was measured on the La Sal Mountains and on Sheep Creek (north slope Uintas). All other areas of the State have below average snow water content.

PRECIPITATION:

April precipitation at mountain and valley stations was generally much below average across the State. In northern Utah April is normally the wettest month of the year. This April, however, an extensive area east of the Great Salt Lake and southward over Utah Lake received less than 20% of normal. Some stations reported the lowest April amounts ever recorded dating back to the early 1900's (Deer Creek Dam-3%, Echo Dam-4% and Morgan-5%). Elsewhere in northern Utah precipitation amounts were generally 10 to 40% of average. April precipitation in southern Utah was generally 30 to 60% and eastern Utah was 40 to 80% of normal. October through April precipitation is

generally 45-75% of normal in the North, 60 to 85% in the South and near normal over eastern areas of the State.

RESERVOIRS:

Twenty-six key irrigation reservoirs in Utah are holding 88% of their accumulated useable capacity which is 117% of average for the end of April. About half of the reservoirs sampled have more than 95% of their useable capacity filled. Record warm temperatures in April resulted in much earlier than normal demand for irrigation releases. On Strawberry Reservoir, for example, this was only the second year in the last 27 that it has been necessary to start releases in April. Additionally, the warm weather produced greatly increased snow melt in April which will reduce late season flows and further increase the demand for stored water. Much below average precipitation in April also increased demand for and decreased the supply of stored water.

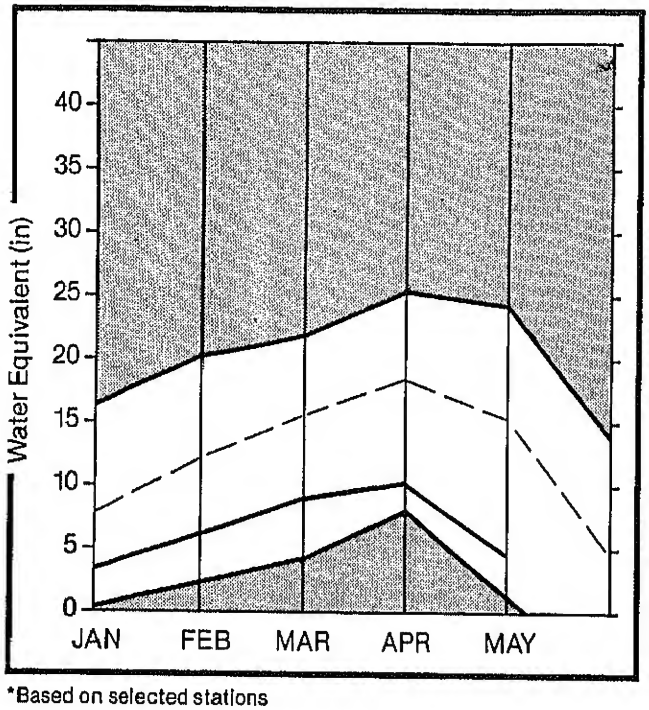
STREAMFLOW:

The abnormally warm and dry weather experienced in April has had and will continue to have an impact on the runoff timing and volume this year. Early and rapid snow melt will lead to early runoff peaks but low late-season flows. With numerous precipitation stations in northern Utah reporting seasonal accumulations in the bottom 10% of their record, there may be some reason for concern if dry conditions persist. The majority of "most probable" forecasts across the State now range from 30 to 70% of average assuming normal precipitation through the forecast period. If below normal precipitation persists, observed flows may more nearly approximate the "reasonable minimum" forecasts presented in this report. If "reasonable minimum" flows materialize, unforeseen water shortages may also materialize, especially in areas where stored water is unavailable.

Forecasts prepared for this bulletin represent cooperative efforts of the Soil Conservation Service and the National Weather Service in an effort to provide the best possible service to water users and managers.

Bear River Basin

Mountain snowpack* (inches)



*Based on selected stations

Maximum

Minimum

Average

Current

WATER SUPPLY OUTLOOK:

Snow surveys taken the last week in April on the Bear River watershed reveal the effects of the record warm temperatures and low precipitation experienced during the month. Snowpack over the entire drainage is only 28% of normal. The amount of snow water lost to melt was more than twice as great as usual this April. Forecasts of spring and summer streamflow now range from 27 to 63% of average assuming normal precipitation during the remainder of the forecast period. Reservoir storage is above average.

For more information contact your local Soil Conservation Service Office:
Tremonton Field Office 801-257-5403
Logan Field Office 801-753-5616

BEAR RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BEAR RIVER near UT-WY Stateline	MAY-JUL	105.0	66.0	63	81.0	77	54.0	51
BEAR near Woodruff	MAY-JUL	126.0	60.0	48	97.0	77	36.0	29
WOODRUFF CREEK near Woodruff	MAY-JUL	15.1	6.8	45	10.0	66	4.0	26
BIG CREEK near Randolph	APR-JUL	5.3	3.0	57	6.0	113	0.8	15
BEAR near Randolph	MAY-JUL	95.0	39.0	41	83.0	87	10.0	11
THOMAS FORK near Stateline	APR-SEP	37.0	10.0	27	17.0	46	4.0	11
SMITHS FORK near Border	APR-SEP	122.0	50.0	41	75.0	61	35.0	29
BEAR RIVER near Harer	APR-SEP	326.0	93.0	29	155.0	48	38.0	12
LOGAN RIVER near Logan	MAY-JUL	107.0	60.0	56	75.0	70	46.0	43
BLACKSMITH FORK near Hyrum	MAY-JUL	38.0	14.1	37	27.0	71	3.0	8
LITTLE BEAR RIVER near Paradise	MAY-JUN	29.0	10.7	37	21.0	72	3.0	10
CUB RIVER near Preston	MAY-JUL	42.9	15.8	37	31.0	72	5.0	12

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
BEAR LAKE	1421.0	1118.9	1123.8	1059.0
HYRUM	15.3	15.4	11.2	13.2
PORCUPINE	11.3	11.3	11.8	9.5
WOODRUFF NARROWS	55.8	57.8	57.7	---
WOODRUFF CREEK		NO REPORT		

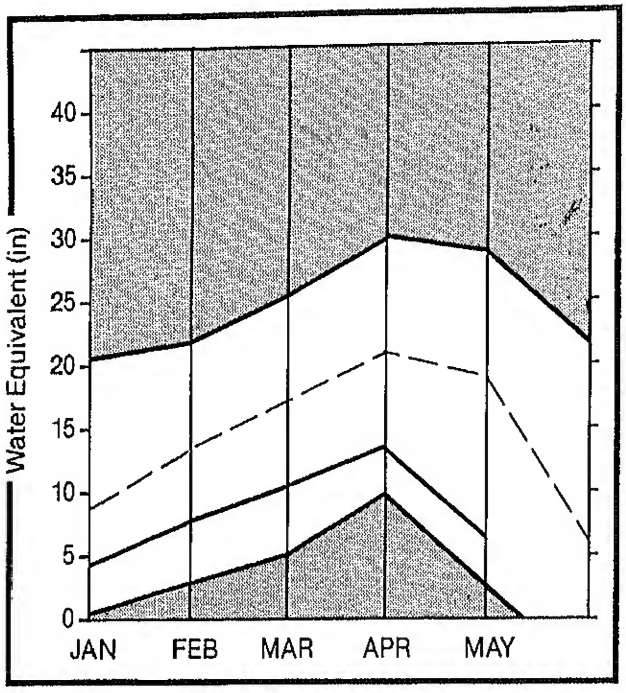
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
BEAR RIVER, UPPER IN UTAH	6	31	42
BEAR RIVER, LOWER IN UTAH	8	19	25
BEAR RIVER DRAINAGE IN UT	13	24	32
BEAR RIVER, UPPER (above	12	25	36
BEAR RIVER, LOWER (below	11	14	19
BEAR RIVER DRAINAGE	21	20	27
LOGAN RIVER	5	17	24
RAFT RIVER	0	0	0
BEAR RIVER BASIN	23	21	28

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Weber & Ogden Watersheds

Mountain snowpack* (inches)



*Based on selected stations

Maximum
Minimum
Average
Current

WATER SUPPLY OUTLOOK:

April snowmelt was more than twice normal as a result of record warm temperatures and below average precipitation. High temperatures and low precipitation coupled with an already low snowpack have produced a May 1 snowpack with only 35% as much water content as usual. Streamflow forecasts for the May-June period fell an average of 11% from levels forecast last month as a result of below normal April precipitation. All reservoirs have above average water in storage except Pineview which will not fill.

For more information contact your local Soil Conservation Service Office:
Layton Sub Office 801-544-9144

WEBER & OGDEN WATERSHEDS in Utah

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
WEBER RIVER near Oakley	MAY-JUN	93.0	71.0	76	86.0	92	57.0	61
ROCKPORT RESERVOIR inflow	MAY-JUN	102.0	68.0	67	92.0	90	46.0	45
CHALK CREEK near Coalville	MAY-JUN	34.0	25.0	74	35.0	103	17.0	50
WEBER RIVER near Coalville	MAY-JUN	105.0	69.0	66	93.0	89	46.0	44
LOST CREEK near Croyden	MAY-JUN	11.2	5.6	50	9.0	80	2.0	18
EAST CANYON CREEK near Morgan	MAY-JUN	19.0	11.0	58	18.0	95	7.0	37
HARDSCRABBLE CREEK near Porterville	APR-JUN	18.4	12.0	65	19.0	103	5.0	27
SOUTH FORK OGDEN RIVER near Huntsvil	MAY-JUN	43.0	25.0	58	37.0	86	15.0	35
PINEVIEW RESERVOIR inflow	MAY-JUN	74.0	30.0	41	45.0	61	17.0	23
WHEELER CREEK near Huntsville	APR-JUL	6.5	3.8	58	5.0	77	3.0	46
ECHO RESERVOIR inflow	MAY-JUN	128.0	85.0	66	114.0	89	57.0	45
WEBER RIVER at Gateway	APR-JUN	328.0	225.0	69	287.0	88	163.0	50
FARMINGTON CREEK near Farmington	MAY-JUL	6.7	4.2	63	7.0	104	2.0	30

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
CAUSEY	6.9	7.1	2.9	2.6
EAST CANYON	48.1	44.1	40.2	41.5
ECHO	73.9	70.7	26.9	54.2
LOST CREEK	20.0	19.0	14.2	14.3
PINEVIEW	110.1	67.7	78.6	76.6
ROCKPORT	60.9	45.1	24.1	36.8
WILLARD BAY	165.5	165.1	160.1	139.7

WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
OGDEN RIVER	4	24	31
WEBER RIVER	15	27	36
WEBER & OGDEN WATERSHEDS	19	26	35

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
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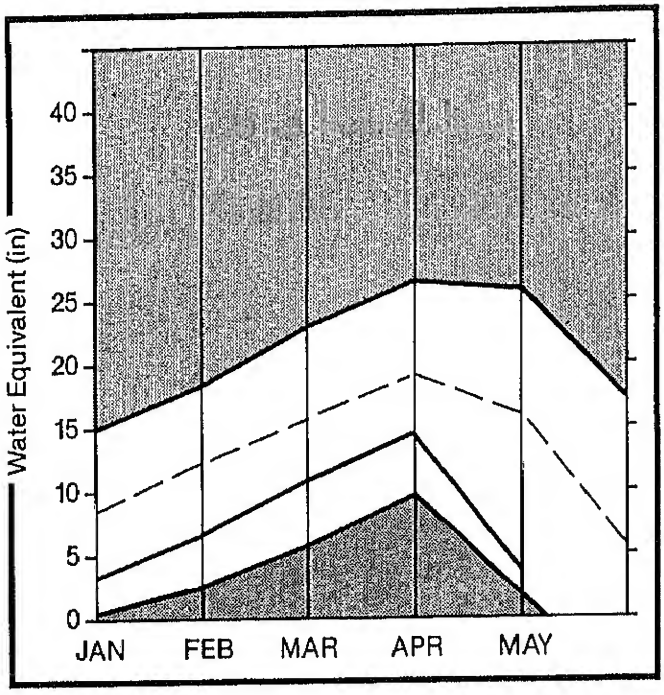
The average is computed for the 1961-85 base period.

Utah Lake, Jordan River & Tooele Valley

Mountain snowpack* (inches)



*Based on selected stations

Maximum Average

Minimum Current

WATER SUPPLY OUTLOOK:

During an average April the Provo R.-Utah Lake-Jordan R. watershed only loses 3.1 inches of snow water to melt. This April the watershed lost 10.7 inches--almost three and one-half times normal April melt. The abnormally high melt combined with below normal April 1 snowpack have left May 1 snowpack at only 27% of normal. Streamflow forecasts, down an average of 15% from last month, now range from 40 to 86% of average. Reservoir storage is above average.

For more information contact your local Soil Conservation Service Office:
Midvale Field Offcie 801-524-4373
Provo Field Office 801-377-5580

UTAH LAKE, JORDAN RIVER & TOOELE VALLEY

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
PROVO near Hailstone	MAY-JUL	100.0	52.0	52	71.0	71	35.0	35
PROVO below Deer Creek Dam	MAY-JUL	108.0	56.0	52	82.0	76	30.0	28
AMERICAN FORK near American Fk.	MAY-JUL	30.0	20.0	67	24.0	80	17.0	57
HOBBLE CREEK near Springville	MAY-JUL	16.8	6.7	40				
STRAWBERRY RESERVOIR inflow	APR-JUL	60.0	26.0	43	37.0	62	15.0	25
PAYSON CREEK near Payson	MAY-JUL	5.8	3.1	53				
UTAH LAKE inflow	MAY-JUL	211.0	140.0	66	205.0	97	75.0	36
LITTLE COTTONWOOD CRK near SLC	MAY-JUL	38.0	26.0	68	29.0	76	24.0	63
BIG COTTONWOOD CRK near SLC	MAY-JUL	35.0	26.0	74	29.0	83	22.0	63
PARLEY'S CEEK near SLC	MAY-JUL	13.0	6.0	46	10.0	77	2.0	15
MILL CREEK near SLC	MAY-JUL	5.9	3.6	61	4.0	68	3.0	51
EMIGRATION CREEK near SLC	MAY-JUL	3.2	1.3	41				
CITY CREEK near SLC	MAY-JUL	7.8	3.8	49	5.0	64	3.0	38
SETTLEMENT CREEK near Tooele	MAY-JUL	2.1	1.8	86	3.0	143	1.0	48
SOUTH WILLOW CREEK near Grantsville	MAY-JUL	2.7	1.6	59	3.0	111	0.0	0
VERNON CREEK near Vernon	MAY-JUN	0.8	0.4	50	0.8	96	0.1	13

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
DEER CREEK	149.7	146.1	97.4	106.9
GRANTSVILLE	3.3	3.2	3.3	---
SETTLEMENT CREEK	1.0	0.8	0.9	0.7
STRAWBERRY-ENLARGED	951.4	551.8	421.6	---
UTAH LAKE	883.9	849.0	1248.6	766.8
VERNON CREEK	0.6	0.6	0.6	0.6

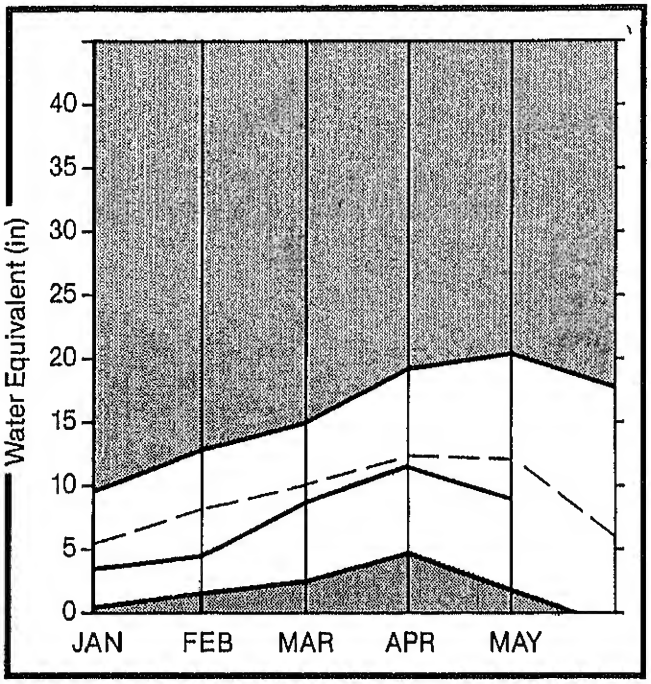
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
PROVO RIVER & UTAH LAKE	10	22	28
PROVO RIVER	5	18	26
JORDAN RIVER & GREAT SALT	5	20	23
TOOELE VALLEY WATERSHEDS	3	37	31
UTAH LAKE, JORDAN RIVER &	18	23	27

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Uintah Basin & Dagget SCD's

Mountain snowpack* (Inches)



*Based on selected stations

Maximum ▒▒▒▒ Average ----

Minimum ▒▒▒▒ Current ——

WATER SUPPLY OUTLOOK:

Snowmelt on the high Uintas usually commences after mid-April with the highest sites normally avoiding melt until well into May. This year, however, the highest snow course in the State (Lakefork Basin, elevation 11,100')began melt on April 15--27 days earlier than usual. Earlier and greater (4 1/2 times) than normal melt have left May 1 snow at 67% of average. Forecasts now range from 30 to 104% of average with most forecasts in the 40 to 70% range. Reservoir storage is much above average.

For more information contact your local Soil Conservation Service Office:
Roosevelt Field Office 801-722-4621

UINTAH BASIN & DAGGET SCD'S

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
DUCHESNE RIVER near Tabiona	MAY-JUL	96.0	56.0	58	68.0	71	44.0	46
DUCHESNE RIVER near Duchesne	APR-JUL	189.0	110.0	58	136.0	72	85.0	45
STRAWBERRY RIVER at Duchesne	APR-JUL	69.0	30.0	43	40.0	58	21.0	30
ROCK CREEK near Mountain Home	MAY-JUL	90.0	54.0	60	68.0	76	43.0	48
CURRANT CREEK near Fruitland	MAY-JUL	16.6	5.0	30	8.0	48	3.0	18
LAKEFORK RIVER near Mountain Home	MAY-JUL	67.0	48.0	72	59.0	88	38.0	57
YELLOWSTONE RIVER near Altonah	MAY-JUL	62.0	47.0	76	64.0	103	30.0	48
DUCHESNE near Myton	MAY-JUL	186.0	80.0	43	128.0	69	24.0	13
WHITE ROCKS RIVER near Whiterocks	MAY-JUL	57.0	43.0	75	60.0	105	26.0	46
UINTAH RIVER near Neola	MAY-JUL	84.0	62.0	77	93.0	111	31.0	37
DUCHESNE near Randlett	APR-JUL	257.0	175.0	68	347.0	135	70.0	27
WEST FORK DUCHESNE RIVER near Hanna	APR-JUL	28.0	15.5	55	20.0	71	11.0	39
HENRY'S FORK near Manila	APR-SEP	51.0	53.0	104	68.0	133	42.0	82
BLACK'S FORK near Millburne	APR-JUL	90.0	75.0	83	98.0	109	55.0	61
FLAMING GORGE RESERVOIR inflow	APR-SEP	1441.0	850.0	59	1110.0	77	620.0	43
	APR-JUL	1267.0	780.0	62	1010.0	80	575.0	45
ASHLEY CREEK near Vernal	MAY-JUL	50.0	37.0	74	47.0	94	29.0	58

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
FLAMING GORGE	3749.0	3136.9	2939.0	---
MOON LAKE	35.8	27.4	25.4	18.1
RED FLEET	26.0	20.8	19.7	---
STEINAKER	33.3	31.3	29.1	23.0
STARVATION	165.3	163.8	146.6	113.3
STRAWBERRY-ENLARGED	951.4	551.8	421.6	---

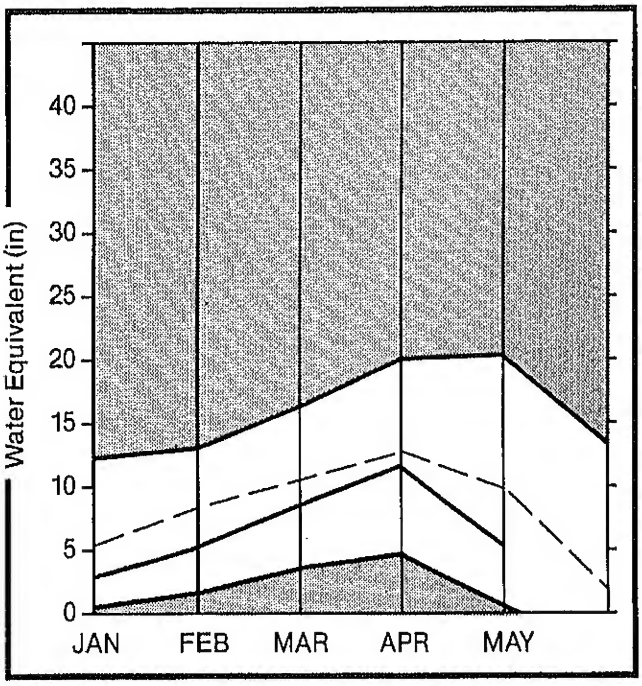
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
UPPER GREEN RIVER in UTAH	13	59	69
ASHLEY CREEK	2	40	46
BLACK'S FORK RIVER	3	60	70
SHEEP CREEK	2	87	100
DUCHESNE RIVER	16	46	65
LAKE FORK-YELLOWSTONE CRE	3	50	80
STRAWBERRY RIVER	4	13	19
UINTAH-WHITEROCKS RIVERS	4	51	78
UINTAH BASIN & DAGGET SCD	29	51	67

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Carbon, Emery, Wayne, Grand, and San Juan Co.

Mountain snowpack* (inches)



*Based on selected stations

Maximum Average

Minimum Current

WATER SUPPLY OUTLOOK:

Snowpack in southeastern Utah ranges from 12% of average on the Book Cliffs to 112% on the La Sals following a warmer and drier than normal April which saw almost twice normal snowmelt. Water supply forecasts range from 41 to 121% of average with Mill Creek near Moab and the San Juan River being two of only four streams in the State with above average flows expected this irrigation season. Stored water in area reservoirs is more than one-third greater in volume than is normal for the end of April.

For more information contact your local Soil Conservation Service Office:
Price Field Office 801-637-0041

CARBON, EMERY, WAYNE, GRAND, & SAN JUAN Co.

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
GOOSEBERRY CREEK near Scofield	MAY-JUL	11.1	5.9	59	8.0	72	4.0	36
SCOFIELD RESERVOIR inflow	MAY-JUL	41.5	17.0	41	24.0	58	12.0	29
PRICE near Heiner	MAY-JUL	70.0	32.0	46				
ELECTRIC LAKE Inflow	MAY-JUL	13.9	6.0	43	8.0	58	4.0	29
HUNTINGTON CREEK near Huntington	MAY-JUL	48.9	23.0	47	31.0	63	16.0	33
COTTONWOOD CREEK near Orangeville	MAY-JUL	43.0	23.0	53	36.0	84	10.0	23
FERRON CREEK near Ferron	MAY-JUL	38.0	21.0	55	29.0	76	13.0	34
MUDDY CREEK near Emery	APR-JUL	21.0	11.5	55	16.0	76	7.0	33
COLORADO near Cisco, UT	APR-JUL	3457.0	3250.0	94	4080.0	118	2525.0	73
	MAY-JUL	2649.0	2490.0	94	3130.0	118	1935.0	73
GREEN near Green Rv., UT	APR-JUL	3182.0	2100.0	66	2705.0	85	1495.0	47
	MAY-JUL	2599.0	1715.0	66	2210.0	85	1220.0	47
MILL CREEK near Moab	MAY-JUL	4.7	5.0	106	6.0	128	4.0	85
NAVAJO RESERVOIR inflow	APR-JUL	764.0	925.0	121	1140.0	149	740.0	97
	MAY-JUL	540.0	653.0	121	805.0	149	525.0	97
SAN JUAN near Bluff, UT	APR-JUL	1091.0	1300.0	119	1640.0	150	1025.0	94
	MAY-JUL	793.0	944.0	119	1190.0	150	745.0	94
SEVEN MILE CREEK near Fish Lake	APR-JUL	6.5	5.0	77	6.0	92	4.0	62

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
HUNTINGTON NORTH	3.9	4.1	3.7	3.9
JOE'S VALLEY	54.6	48.2	48.1	46.8
KEN'S LAKE	2.3	1.0	1.6	---
MILL SITE	16.7	14.8	9.9	6.3
SCOFIELD	65.8	57.9	45.7	36.6

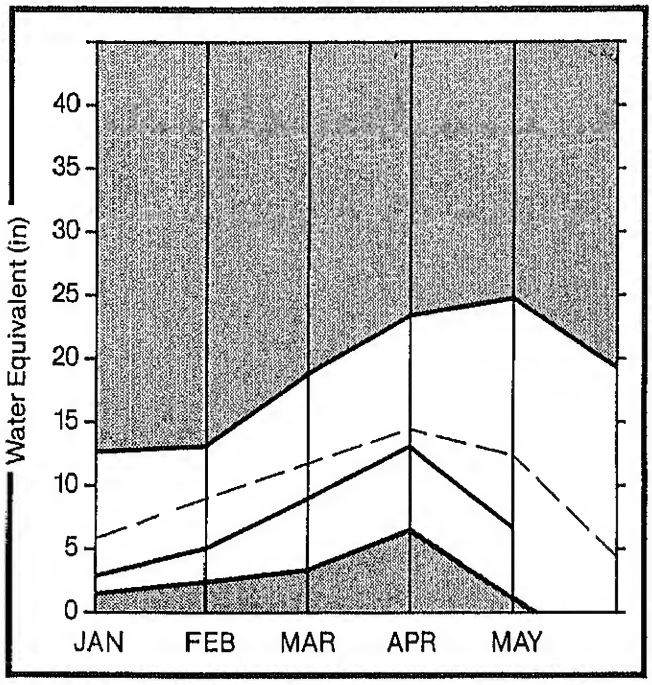
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
PRICE RIVER	3	15	19
SAN RAFAEL RIVER	7	47	54
MUDDY RIVER	2	21	18
FREMONT RIVER	3	44	26
LASAL MOUNTAINS	2	129	112
BLUE MOUNTAINS	2	335	70
WILLOW CREEK - WHITE RIVE	0	0	0
CARBON, EMERY, WAYNE, GRA	20	57	54

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Sevier & Beaver River Basins

Mountain snowpack* (inches)



*Based on selected stations

Maximum Average

Minimum Current

WATER SUPPLY OUTLOOK:

Snowmelt during April was more
normal as a result of above average temperature and below average precipitation. This combination of factors has brought the May 1 snowpack over the Sevier Basin to 56% of average. Forecasts of spring and summer streamflow have suffered an average reduction of 18% from the levels forecast one month ago. Forecasts now range from 36 to 140% of average. Stored water in the reservoirs on the Sevier is 151% of average and 93% of capacity.

For more information contact your local Soil Conservation Service Office:
Richfield Field Office 801-896-6261
Fillmore Field Office 801-743-6655

SEVIER & BEAVER RIVER BASINS

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
SEVIER at Hatch	MAY-JUL	44.9	35.0	78	48.0	107	26.0	58
SEVIER near Circleville	MAY-JUL	36.2	25.0	69				
SEVIER near Kingston	MAY-JUL	25.7	18.0	70	34.0	132	4.0	16
ANTIMONY CREEK near Antimony	MAY-JUL	6.9	5.5	80				
E F SEVIER near Kingston	MAY-JUL	16.4	12.0	73	22.0	134	5.0	30
SEVIER blw Piute Dam	MAY-JUL	42.0	29.0	69	57.0	136	4.0	10
CLEAR CREEK near Sevier	MAY-JUL	18.5	14.8	80				
SIGURD to GUNNISON	MAY-JUL	36.4	51.0	140	85.0	234	18.0	49
KINGSTON to VERMILLION DAM	MAY-JUN	32.7	34.0	104				
VERMILLION DAM to GUNNISON	MAY-JUL	19.0	26.6	140				
SALINA CREEK at Salina	MAY-JUN	16.2	10.2	63				
SEVIER nr Gunnison	MAY-JUL	79.6	78.0	98				
CHALK CREEK near Fillmore	MAY-JUL	13.2	9.8	74	13.0	98	7.0	53
CHICKEN CREEK near Levan	APR-JUL	3.5	2.2	63	3.0	86	1.0	29
OAK CREEK near Oak City	MAY-JUL	1.1	0.4	36	1.0	91	0.0	0
EPHRAIM CREEK near Ephraim	MAY-JUL	22.0	11.5	52				
PLEASANT CREEK near Pleasant	MAY-JUL	11.6	5.6	48				
SALT CREEK near Nephi	MAY-JUL	10.8	7.3	68	13.0	120	1.0	9
BEAVER RIVER near Beaver	MAY-JUL	24.0	19.0	79	27.0	113	11.0	46
NORTH CREEK near Beaver (combined N	MAY-JUL	12.7	10.5	83	18.0	142	3.0	24
MINERSVILLE RESERVOIR inflow	APR-JUN	8.9	8.0	90	11.0	124	5.0	56

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
GUNNISON	20.3	20.3	18.2	14.9
MINERSVILLE (RkyFd)	26.0	24.4	23.1	14.6
OTTER CREEK	52.6	52.6	52.5	39.5
PIUTE	71.8	69.5	65.1	44.7
SEVIER BRIDGE	236.0	211.1	223.4	136.0
PANQUITCH LAKE	22.3	20.3	21.5	---

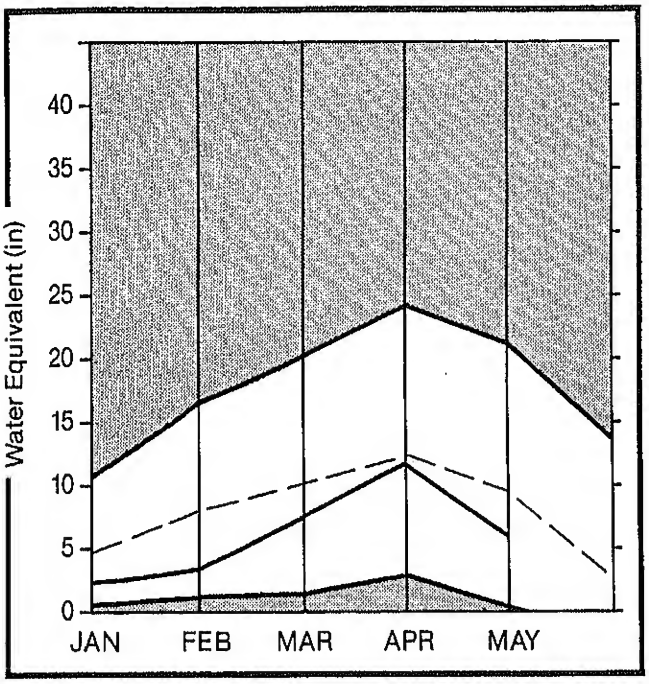
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
UPPER SEVIER RIVER (south	11	76	60
EAST FORK SEVIER RIVER	4	90	62
SOUTH FORK SEVIER RIVER	7	71	60
LOWER SEVIER RIVER (inclu	12	51	53
BEAVER RIVER	3	39	60
SEVIER & BEAVER RIVER BAS	26	54	56

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

E. Garfield, Kane, Washington, & Iron Co.

Mountain snowpack* (inches)



*Based on selected stations

Maximum

Minimum

Average

Current

WATER SUPPLY OUTLOOK:

The snowpack in southwestern Utah lost twice as much melt water last month than is normal for April in response to the warmer and drier than normal weather conditions experienced during the month. Snow water ranges from 0% on the Enterprise-New Harmony snow courses to 114% of average on the Escalante River courses. Streamflow forecasts on the Virgin River, Santa Clara River and Coal Creek are 64, 53 and 57% of average respectively. Area reservoirs are still holding only about 68% of their cumulative capacity.

For more information contact your local Soil Conservation Service Office:
Cedar City Field Office 801-586-2429

E. GARFIELD, KANE, WASHINGTON, & IRON Co.

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
VIRGIN near Hurricane	MAY-JUN	43.8	28.0	64	49.0	112	7.0	16
SANTA CLARA near Pine Valley	MAY-JUN	4.0	2.1	53				
COAL CREEK near Cedar City	MAY-JUL	16.8	9.6	57	15.0	89	6.0	36
LAKE POWELL inflow	APR-JUL	8046.0	7000.0	87	8860.0	110	5300.0	66
	MAY-JUL	6475.0	5200.0	80	6690.0	103	3840.0	59

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
GUNLOCK	10.4	7.0	9.3	---
LAKE POWELL	25002.0	0.0	22220.0	---
QUAIL CREEK	40.0	32.0	24.0	---
UPPER ENTERPRISE	10.0	3.0	5.0	---
LOWER ENTERPRISE	2.6	0.6	1.3	---

WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	THIS YEAR AS % OF AVERAGE
VIRGIN RIVER	5	80	61
PAROWAN	4	89	68
ENTERPRISE TO NEW HARMONY	2	0	0
COAL CREEK	3	80	65
ESCALANTE RIVER	1	182	114
E. GARFIELD, KANE, WASHIN	12	84	61

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

SNOW MEASUREMENT DATA

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
ASHLEY TWIN LAKES	10500	04/29	41	11.1	22.3	18.0
ATWOOD LAKE	10500	04/29	27	8.6	15.3	13.3
BEAVER CREEK DIVIDE	8280	04/23	0	0.0	8.0	6.5
BEAVER DAMS	8000	04/24	0	0.0	1.0	8.0
BEN LOMOND PEAK	8000	04/23	42	18.4	53.7	39.4
BEN LOMOND TRAIL	6000	04/23	0	0.0	11.7	9.6
BEVAN'S CABIN	6450	04/30	0	0.0	2.6	5.5
BIG FLAT	10290	04/23	48	14.9	31.8	21.6
BIRCH CROSSING	8100	04/28	0	0.0	0.0	2.0
BLACK'S FLAT-U.M. CK	9400	04/24	14	3.5	8.2	9.4
BLACK'S FORK	9200	04/24	-	0.0E	7.9	11.9
BLACK'S FORK GS-EF	9340	04/23	19	6.8	10.7	9.9
BLACK'S FORK JUNCTN	8930	04/23	8	2.7	8.0	8.3
BOX CREEK	9300	04/23	18	6.2	13.7	13.2
BRIAN HEAD	10000	04/23	53	20.0	24.3	22.0
BRIGHTON	8750	04/30	30	11.8	-	40.2
BROWN DUCK RIDGE	10600	04/24	55	19.0	34.9	22.4
BRYCE CANYON	8000	04/27	0	0.0	0.0	0.6
BUCK FLAT	9800	04/24	26	9.6	22.0	17.2
BUCK PASTURE	9700	04/29	27	9.2	22.6	17.2
BUCKBOARD FLAT	9000	04/27	20	8.0	3.1	8.3
BUG LAKE	7950	04/23	25	8.0	26.6	19.4
BURT'S-MILLER RANCH	7900	04/23	0	0.0	0.0	2.4
CAMP JACKSON	8600	04/27	8	3.0	0.0	7.5
CASTLE VALLEY	9580	04/23	16	5.9	7.9	8.5
CHALK CREEK #1	9100	04/23	41	15.2	37.6	25.0
CHALK CREEK #2	8200	04/23	19	6.6	20.4	14.4
CHALK CREEK #3	7500	04/23	0	0.0	0.0	3.1
CHEPETA	10300	04/24	31	10.1	23.2	13.9
CHEPETA-WHITERKS. LK	10350	04/29	41	13.5	19.1	15.7
CLEAR CREEK MEADOWS	9420				-	20.6
CLEAR CREEK RIDGE #1	9200	04/24	17	6.1	21.1	18.0
CLEAR CREEK RIDGE #2	8000	04/24	9	2.9	12.2	10.8
CLEAR CREEK RIDGE #3	6600	04/24	0	0.0	0.0	0.1
CURRANT CREEK	8000	04/24	0	0.0	0.0	2.8
DANIELS-STRAWBERRY	8000	04/24	0	0.0	17.2	9.9
DESERET PEAK	9250				24.1	26.9
DILL'S CAMP	9200	04/24	11	3.8	9.8	9.4
DONKEY RESERVOIR	9800	04/23	32	8.1	-	5.5
DRY BREAD POND	8350	04/23	3	1.0	24.2	18.2
DUCK CREEK R.S.	8700	04/23	-	0.0E	0.0	9.2
EAST SHINGLE LAKE	9800	04/29	36	12.2	45.5	28.9
EAST WILLOW CREEK	8250	04/28	-	1.0E	-	7.2
FARMINGTON CANYON	8000	04/24	40	17.1	44.7	33.7
FARMINGTON CANYON L.	6950	04/24	26	10.4	30.6	23.7
FARNSWORTH LAKE	9600	04/24	54	19.9	22.6	22.9
FISH LAKE	8700	04/24	5	1.7	3.6	5.9
FIVE POINT LAKE	11000	04/29	41	13.1	20.4	18.4
G.B.R.C. HEADQUARTER	8700	04/24	29	10.9	20.2	17.6
G.B.R.C. MEADOWS	10000	04/24	51	19.4	32.9	27.2
GARDEN CITY SUMMIT	7600	04/23	12	4.2	23.5	17.2
GEORGE CREEK	8840				-	-
GOOSEBERRY R.S.	8000	04/24	16	5.4	7.6	10.0
HARDSCRABBLE	6700	04/24	0	0.0	13.0	11.1
HARRIS FLAT	7700	04/23	0	0.0	0.0	2.9
HAYDEN FORK	9400	04/23	25	8.5	22.4	16.1
HENRY'S FORK	10000	04/29	34	11.2	14.2	13.4
HEWINTA G.S.	9500	04/23	22	7.1	10.2	10.2
HOLE-IN-THE-ROCK	9150	04/24	14	4.0	6.7	6.0
HOLE-IN-THE-ROCK GS	8300				-	0.0
HICKERSON PARK	9100	04/24	21	6.0	6.8	6.5

SNOW MEASUREMENT DATA (cont.)

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
HOBBLE CREEK SUMMIT	7420	04/24	0	0.0	9.2	8.3
HORSE RIDGE	8260	04/23	8	2.9	28.2	20.0
HUNTINGTON-HORSESHOE	9800	04/23	43	16.1	34.9	27.4
INDIAN CANYON	9100	04/24	20	7.2	18.3	10.9
JOHNSON VALLEY	8850	04/24	0	0.0	0.0	4.6
KILFOIL CREEK	7300	04/23	16	5.6	14.9	10.7
KIMBERLY MINE(UPPER)	9300	04/23	38	13.4	20.0	17.2
KING'S CABIN (UPPER)	8730	04/24	13	4.0	9.9	9.8
KLONDIKE NARROWS	7400	04/23	0	.0	15.7	15.8
KOLOB-CRYSTAL	9250	04/23	29	11.6	14.5	21.6
LAKEFORK BASIN	11100	04/29	43	15.0	28.8	22.4
LAKEFORK MOUNTAIN #1	10200	04/24	31	10.1	19.4	12.1
LAKEFORK MOUNTAIN #3	8400	04/24	0	0.0	3.6	2.0
LAMBS CANYON	7400	04/28	0	0.0	10.4	11.0
LASAL MOUNTAIN LOWER	8800	04/28	11	4.4	0.0	5.3
LASAL MOUNTAIN (UPP)	9850	04/28	44	17.6	17.0	14.4
LIGHTNING LAKE	10500	04/29	60	21.0	33.3	25.8
LILY LAKE	9050	04/23	16	5.6	18.5	14.2
LITTLE BEAR (LOWER)	6000	04/23	0	0.0	.4	1.9
LITTLE BEAR (UPPER)	6560	04/23	0	0.0	1.1	5.6
LITTLE GRASSY CREEK	6100	04/23	0	0.0	0.0	0.1
LONG FLAT	8000	04/23	0	0.0	0.0	2.0
LONG VALLEY JCT.	7500	04/23	0	0.0	0.0	0.0
LOST CREEK RESERVOIR	6130	04/23	0	0.0	0.0	0.0
MAMMOTH-COTTONWOOD	8800	04/23	20	6.9	27.4	20.9
MERCHANT VALLEY (UP)	8750	04/23	8	2.7	15.7	7.9
MIDDLE BEAVER CREEK	8650				-	4.0
MIDDLE CANYON	7000	04/30	0	0.0	4.1	10.0
MIDWAY VALLEY	9800	04/23	43	18.4	25.3	24.1
MILL CREEK	6950	04/29	20	8.6	24.3	20.6
MILL D SOUTH FORK	7400	04/29	0	0.0	14.6	15.4
MONTE CRISTO R.S.	8960	04/23	25	9.8	33.0	26.5
MOSBY MOUNTAIN(LOW)	9500	04/24	26	7.5	17.7	10.5
MT.BALDY R.S.	9500	04/24	46	16.6	32.2	26.2
MUD CREEK #2	8600	04/24	8	2.6	12.0	8.9
OAK CREEK	7760	04/23	9	2.8	12.5	9.5
ONE MILE SUMMIT	7330				-	0.0
OTTER LAKE	9600	04/23	26	8.9	20.9	14.5
PANQUITCH LAKE	8200	04/23	0	0.0	0.0	1.3
PARADISE PARK	10100	04/24	35	12.0	23.8	15.2
PARLEY'S CANYON SUM.	7500	04/28	5	1.6	20.3	14.2
PAYSON R.S.	8050	04/23	23	8.2	17.4	16.3
PICKLE KEG SPRING	9600	04/24	25	9.4	12.7	15.8
PINE CANYON	8000	04/23	7	2.6	19.4	14.8
PINE CREEK	8800	04/23	23	8.7	19.2	15.5
REDDEN MINE LOWER	8500	04/23	10	4.2	25.4	17.9
RED PINE RIDGE	9200	04/24	20	7.6	15.9	15.9
REES'S FLAT	7300	04/23	1	0.1	8.4	11.0
REYNOLDS PARK	10400	04/29	37	12.2	21.6	18.0
ROCK CREEK	7900	04/24	0	0.0	2.6	1.4
ROCKY BASIN-SETTLEMT	8900	04/30	34	14.1	31.9	30.0
SEELEY CREEK R.S.	10000	04/24	38	15.3	25.6	19.0
SERGEANT LAKES	8300	04/29	0	0.0	3.4	11.7
SHINGLE MILL	6200	04/30	0	0.0	0.0	3.3
SILVER LAKE(BRIGHT.)	8730	04/29	22	10.6	36.6	28.2
SMITH & MOREHOUSE	7600	04/23	1	.3	9.4	9.2
SNOWBIRD GAD VALLEY	9700	04/23	78	30.2	-	40.0
SOAPSTONE R.S.	7800	04/23	-	0.0E	0.0	7.2
SPIRIT LAKE	10300	04/24	43	16.4	19.0	15.9
SQUAW SPRINGS	9300	04/23	0	0.0	0.0	4.9

SNOW MEASUREMENT DATA (cont.)

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
STEEL CREEK PARK	10100	04/23	52	16.6	25.0	19.0
STILLWATER CAMP	8550	04/23	8	2.1	10.0	8.4
STRAWBERRY DIVIDE	8400	05/01	0	0.0	20.5	14.9
STUART R.S.	7950	04/24	0	0.0	0.0	2.3
SUSC RANCH	8200	04/28	0	0.0	0.0	2.7
TALL POLES	8800	04/28	18	4.9	8.0	12.7
THAYNES CANYON	9200				-	-
THISTLE FLAT	8500				-	17.5
TIMPANOGOS DIVIDE	8140	04/24	12	5.1	30.6	23.0
TONY GROVE LAKE	8400	04/23	26	9.1	53.2	35.8
TONY GROVE R.S.	6250	04/23	0	0.0	.2	3.8
TRIAL LAKE	9960	04/23	40	13.7	45.9	26.6
TROUT CREEK	9400	04/24	18	5.1	12.6	10.1
UPPER JOES VALLEY	8900	04/24	1	0.1	5.5	6.6
VERNON CREEK	7500	04/30	-	0.0E	-	5.1
VIPONT	7670				-	8.0
WEBSTER FLAT	9200	24/23	24	9.7	9.7	16.3
WHITE RIVER #1	8550	04/24	6	1.3	13.3	10.6
WHITE RIVER #3	7400	04/24	0	0.0	0.0	0.8
WIDTSOE-ESCALANTE #3	9500	04/23	37	12.0	6.6	10.5
WRIGLEY CREEK	9000	04/24	12	3.5	7.3	9.0
YANKEE RESERVOIR	8700	04/23	15	5.0	1.4	7.3

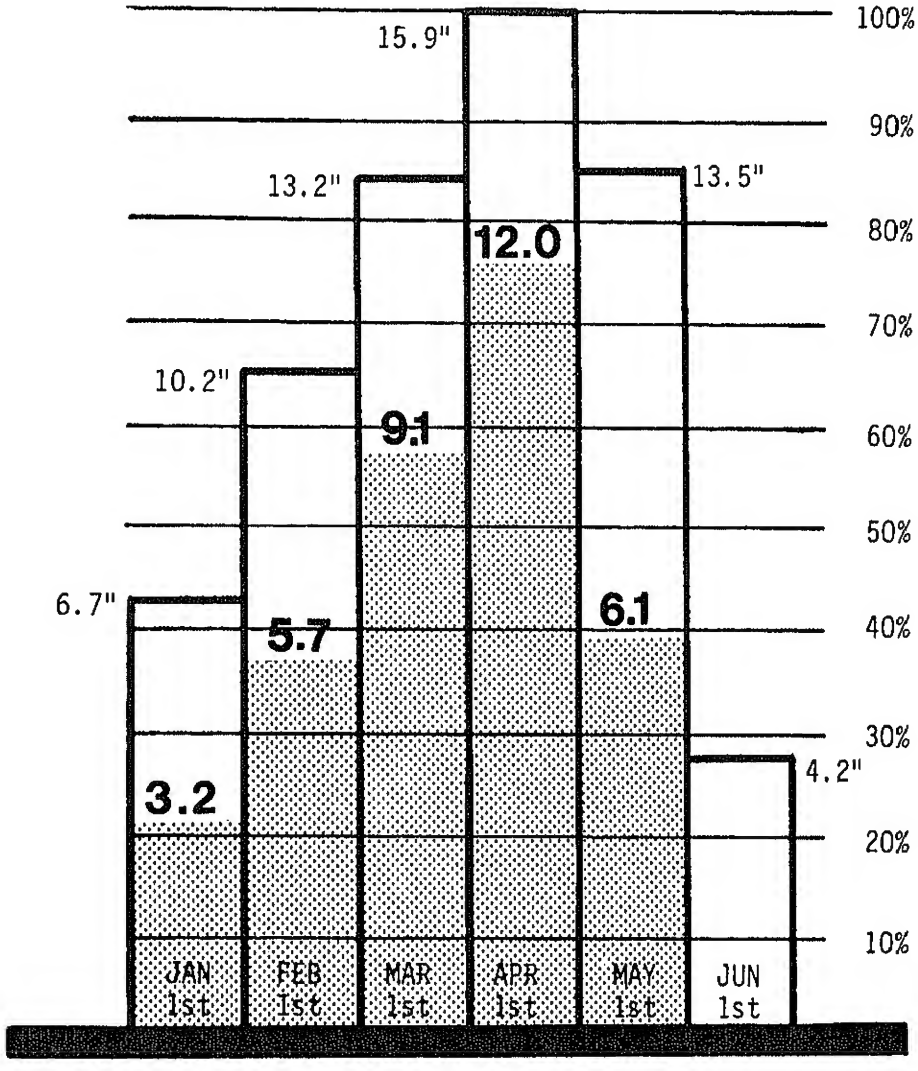
United States Department of Agriculture

Soil Conservation Service

Salt Lake City, Utah

Utah Snowpack Progress

1987

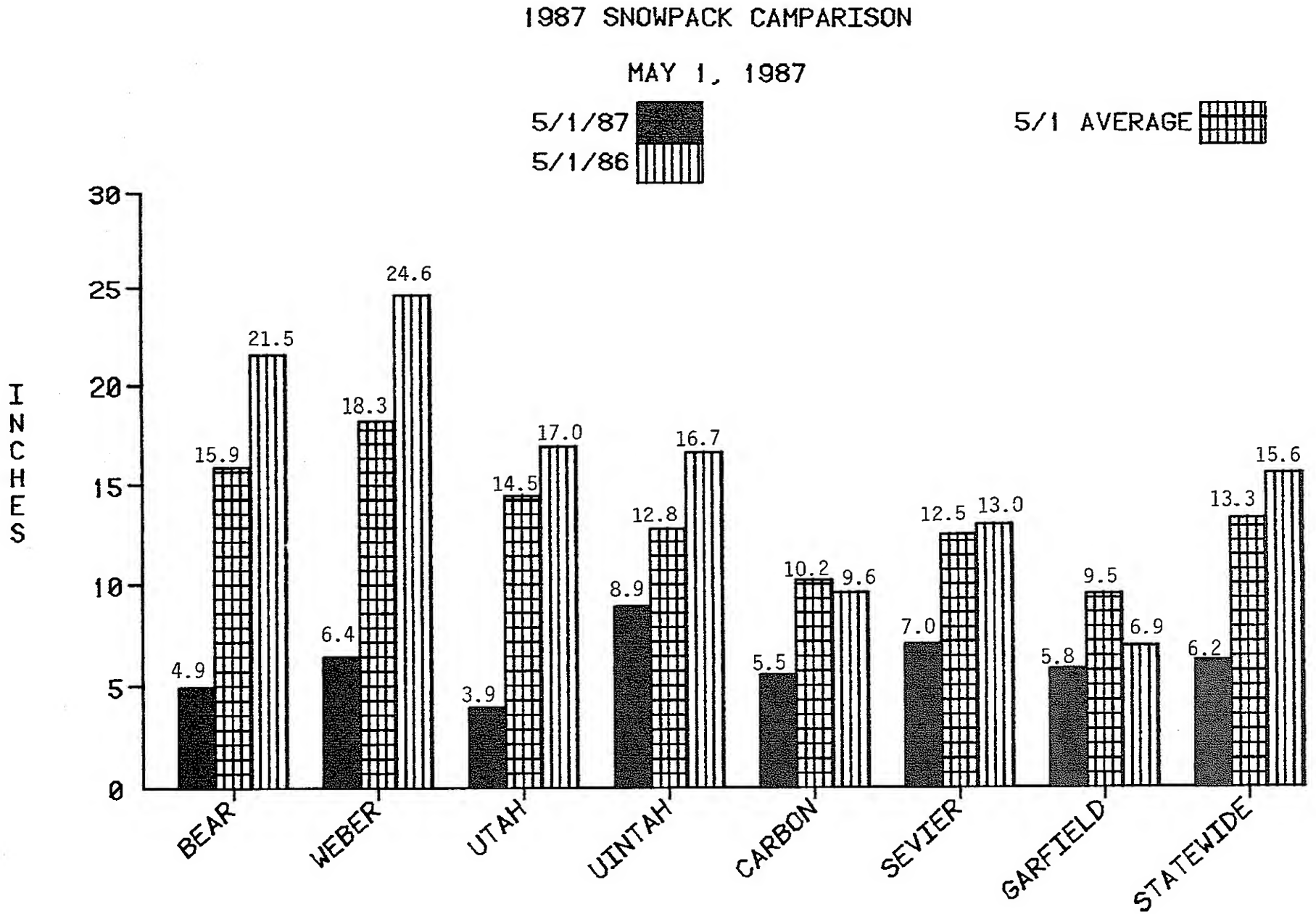


Statewide

N O T E :

Snow water equivalent in inches is compared to the highest seasonal amount (100%). Monthly averages are accumulated by basin/state.

Averages are for the period 1961-1985.


1987 SNOWPACK CAMPARISON
MAY 1, 1987
5/1/87
5/1/86
5/1 AVERAGE
INCHES
30
25
20
15
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0
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17.0
8.9
12.8
16.7
5.5
10.2
9.6
7.0
12.5
13.0
5.8
9.5
6.9
6.2
13.3
15.6
BEAR
WEBER
UTAH
UINTAH
CARBON
SEVIER
GARFIELD
STATEWIDE

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State

Utah State University
Utah State Department of Natural Resources
- Division of Wildlife Resources
- Division of Water Resources
- Division of Water Rights
- Bear River Commissioner
- Price River Commissioner
- Provo River Commissioner
- Sevier River Commissioners
- Spanish Fork River Commissioner
- Utah Lake and Jordan River Commissioner

Federal

U.S. Department of Agriculture
- Soil Conservation Service
- Forest Service

U.S. Department of Commerce
- NOAA, National Weather Service

U.S. Department of Interior
- Bureau of Reclamation
- Geological Survey
- National Park Service

Municipality

Manti
Salt Lake City

Public

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Central Utah Conservancy District
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association
Weber River Water Users Association
Weber Basin Conservancy District

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.